ABSTRACT

A method and a system for computing the function value of an input node based on function values of known nodes. A database of known nodes and their corresponding function values is formed. The known nodes are located such that a distance between any two adjacent known nodes is an integer power-of-two number. The database is searched for a first node such that the input node is located between the first node and an adjacent second node. The difference δ between the input node and the first node is computed. Then δ is shifted to the right by k positions, k being the logarithm in base 2 of the distance between the first and second nodes. The input node function value is computed by combining the first node function value with the product of the shifted δ and the difference between the function values of the second and first nodes. When used in MRC context, the above method and system is applied to each of the color MRC planes individually, instead of the merged output. The resulting performance is approved since most if not all of the color MRC planes are sub-sampled.